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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,904	08/27/2003	Toshihisa Hirata	A3-171 US	5066
23683	7590	04/20/2004	EXAMINER	
MOLEX INCORPORATED 2222 WELLINGTON COURT LISLE, IL 60532				LUEBKE, RENEE S
		ART UNIT		PAPER NUMBER
		2833		

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/648,904	HIRATA & SASAO
<b>Examiner</b>	<b>Art Unit</b>	
Renee S. Luebke	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

## **Disposition of Claims**

4)  Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-13 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 27 August 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_ .

1. The drawings are objected to because of the small, hand-written numerals. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. Claims 2 and 5 are objected to because of the following informalities:

- On line 2 of claim 2, it appears that "having" should be -have-.
- On line 2 of claim 5, it appears that "including" should be -includes-.

Appropriate correction is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaufman, et al. This board-to-board electrical connector comprises a first connector 24 with a dielectric housing, terminals and posts 44; and a second connector with a dielectric housing, terminals and passages 96. The posts and passages have beveled ends 46, 98. As seen in Figs. 5 and 6, the posts fit snugly and extend through the passages to the mounting face of the second connector. In regard to claim 9, the posts are seen to be "generally at four corners of the housing" since each post is closely associated with a narrow end and two of the four corners.

5. Claims 5-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman. In regard to claims 5 and 6, the use of four posts and passages is seen to have been an obvious duplication of parts for the purpose of more securely attaching the housings. In regard to claims 7 and 10, the posts and passages of Kaufman are arranged to polarize the device so that it is not attached in the wrong manner. The use of a post that is a different size is a well known alternative to the polarization method of Kaufman and would have been an obvious alternative thereto for the same reason.

6. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman in view of Okura. The similar connector of Okura comprises terminals that are mounted to the housing through terminal mounting holes in the manner claimed. Such an arrangement allows easy and secure insertion for the terminals. For the same reasons, it would have been obvious to use this type of terminal in the housing of Kaufman.

7. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Ito, et al. This board-to-board electrical connector comprises a first connector 2 with a dielectric housing 21 and terminals 22 with tail portions 22A and contact portions; and a second connector 1 with a dielectric housing 11 having a mounting face and a mating face 10a with passages 44; and a plurality of second terminals 12 with tail portions 12A, U-shaped contact portions and mounting portions 32. The second terminals are seen to be top loaded when the arrangement of Fig. 1 is rotated 180° and the second board 17 is at the top.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamada, et al. is a further example of a top loaded terminal with a tail portion, a U-shaped contact portion and a mounting portion.

9. Any response to this action may be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mrs. Renee Luebke at (571) 272-2009. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mrs. Paula Bradley, can be reached at (571) 272-2800, extension 33.



Renee S. Luebke  
Primary Patent Examiner  
April 14, 2004